

under 37 C.F.R. § 1.136(a), and any fees required therefor (including fees for net addition of claims) are hereby authorized to be charged to our Deposit Account No. 19-0036.

Amendments

In the Claims:

Please substitute the following claim 1 for the pending claim 1:

~~1. (Once amended) A serum free cell culture medium comprising at least one transition metal binding compound or at least one transition element complex, said complex comprising at least one transition element or a salt or ion thereof complexed to at least one transition metal-binding compound, wherein said medium is capable of supporting the cultivation of a cell *in vitro*, with the proviso that said transition metal binding compound is not citrate.~~

Sub C

new matter

Please substitute the following claim 2 for the pending claim 2:

2. (Once amended) The medium of claim 1, wherein said transition element is selected from the group consisting of scandium, titanium, vanadium, chromium, manganese, iron, cobalt, nickel, copper, zinc, yttrium, zirconium, niobium, molybdenum, technetium, rubidium, rhodium, palladium, silver, cadmium, lanthanum, hafnium, tantalum, tungsten, rhenium, osmium, iridium, platinum, gold, mercury, actinium, and salts thereof.

Please substitute the following claim 4 for the pending claim 4:

- A2
4. (Once amended) The medium of claim 1, wherein said transition metal-binding compound is selected from the group consisting of a polyol, a hydroxypyridine *elect* derivative, 1,3,5-N,N',N''-tris(2,3-dihydroxybenzoyl)aminomethylbenzene, ethylenediamine-N,N'-tetramethylenephosphonic acid, trisuccin, an acidic saccharide, a glycosaminoglycan, diethylenetriaminepentaacetic acid, nitrilotriacetic acid mono-substituted 2,2'-bipyridine, bis-substituted 2,2'-bipyridine, tris-substituted 2,2'-bipyridine, a hydroxamate derivative, an amino acid, deferoxamine, ferrioxamine, iron basic porphine, porphyrin and derivatives thereof, DOTA-lysine, a texaphyrin, a sapphyrin, a polyaminocarboxylic acid, an α -hydroxycarboxylic acid, a polyethylenecarbamate, picolinic acid, 4-pyridoxic acid, 3-hydroxy-2-pyridinemaltol, ethyl maltol, Ustilago ferrichrome, nicotinic acid-N-oxide and IRC011.
- But B1

Please substitute the following claim 8 for the pending claim 8:

- A3
8. (Once amended) The medium of claim 1, wherein said transition metal-binding compound is a hydroxypyridine derivative.
- Subst

Please substitute the following claim 9 for the pending claim 9:

- OK
9. (Once amended) The medium of claim 8, wherein said hydroxypyridine derivative is selected from the group consisting of 2-hydroxypyridine-N-oxide, 3-hydroxy-4-pyrone, 3-hydroxypyrid-2-one, 3-hydroxypyrid-2-one, 3-hydroxypyrid-4-one, 1-hydroxypyrid-2-one, 1,2-dimethyl-3-hydroxypyrid-4-one, 1-methyl-3-

hydroxypyrid-2-one, 3-hydroxy-2(1H)-pyridinone, pyridoxal isonicotinyl hydrazone,
609-71-2
nicotinic acid-N-oxide, and 2-hydroxy-nicotinic acid.

or
wait

Please substitute the following claim 15 for the pending claim 15:

A4
Subst
C
15. (Once amended) The cell culture medium of claim 1, said medium further comprising one or more ingredients selected from the group of ingredients consisting of at least one amino acid, at least one vitamin, at least one inorganic salt, at least one organic salt, at least one trace metal, at least one nucleotide, at least one buffering salt, at least one sugar, at least one lipid and at least one hormone.

Please substitute the following claim 22 for the pending claim 22:

A5
Subst
C
22. (Once amended) The medium of claim 1, wherein said medium does not contain transferrin.

Please substitute the following claim 24 for the pending claim 24:

A6
Subst
C
(24.) (Once amended) A cell culture medium obtained by combining a cell culture medium with at least one transition metal binding compound or at least one transition element complex, said complex comprising at least one transition element or a salt or ion thereof complexed to at least one transition metal-binding compound, wherein said medium is capable of supporting the cultivation of a cell *in vitro*, with the proviso that said transition metal binding compound is not citrate.

Please substitute the following claim 25 for the pending claim 25:

Cont
A6

25. (Once amended) The medium obtained according to claim 24, wherein said transition element is selected from the group consisting of scandium, titanium, vanadium, chromium, manganese, iron, cobalt, nickel, copper, zinc, yttrium, zirconium, niobium, molybdenum, technetium, rubidium, rhodium, palladium, silver, cadmium, lanthanum, hafnium, tantalum, tungsten, rhenium, osmium, iridium, platinum, gold, mercury, actinium, and salts thereof.

Please substitute the following claim 27 for the pending claim 27:

27. (Once amended) The medium obtained according to claim 24, wherein said metal-binding compound is selected from the group consisting of a polyol, a ^{deduced species} hydroxypyridine derivative, 1,3,5-N,N',N''-tris(2,3-dihydroxybenzoyl)aminomethylbenzene, ethylenediamine-N,N'-tetramethylenephosphonic acid, trisuccin, an acidic saccharide, a glycosaminoglycan, diethylenetriaminepentaacetic acid, nitrilotriacetic acid, mono-substituted 2,2'-bipyridine, bis-substituted 2,2'-bipyridine, tris-substituted 2,2'-bipyridine, a hydroxamate derivative, an amino acid derivative, deferoxamine, ferrioxamine, iron basic porphine, porphyrin and derivatives thereof, DOTA-lysine, a texaphyrin, a sapphyrin, a polyaminocarboxylic acid, an α -hydroxycarboxylic acid, a polyethylenecarbamate, picolinic acid, 4-pyridoxic acid, 3-hydroxy-2-pyridineethyl maltol, maltol, Ustilago ferrichrome, nicotinic acid-N-oxide, 2-hydroxy-nicotinic acid, and IRC011.

Please substitute the following claim 32 for the pending claim 32:

AG Subst C1
32. (Once amended) The medium obtained according to claim 31, wherein said hydroxypyridine derivative is selected from the group consisting of 2-hydroxypyridine-N-oxide, 3-hydroxy-4-pyrone, 3-hydroxypyrid-2-one, 3-hydroxypyrid-4-one, 1-hydroxypyrid-2-one, 1,2-dimethyl-3-hydroxypyrid-4-one, 1-methyl-3-hydroxypyrid-2-one, 3-hydroxy-2(1H)-pyridinone, pyridoxal isonicotinyl hydrazone, nicotinic acid-N-oxide, and 2-hydroxy-nicotinic acid.

Please substitute the following claim 44 for the pending claim 44:

AG
44. (Once amended) A kit for the cultivation of a cell *in vitro*, said kit comprising at least one component selected from the group consisting of one or more cell culture media or media ingredients, one or more transition elements, (one or more transition element complexes) and one or more cells, and at least one second component selected from the group consisting of one or more transition metal binding compounds and at least one transition element complex, said complex comprising at least one transition element or a salt or ion thereof complexed to at least one transition metal-binding compound.

But B3
w/dep
repeats
not
described

Please substitute the following claim 45 for the pending claim 45:

Subst C1
45. (Once amended) The kit of claim 44, wherein said transition element is selected from the group consisting of scandium, titanium, vanadium, chromium, manganese, (iron), cobalt, nickel, copper, zinc, yttrium, zirconium, niobium, molybdenum, technetium,

Cont
AG

rubidium, rhodium, palladium, silver, cadmium, lanthanum, hafnium, tantalum, tungsten, rhenium, osmium, iridium, platinum, gold, mercury, actinium, and salts thereof.

Please substitute the following claim 47 for the pending claim 47:

47. (Once Amended) The kit of claim 44, wherein said metal-binding compound is selected from the group consisting of a polyol, a hydroxypyridine derivative, 1,3,5-N,N',N''-tris(2,3-dihydroxybenzoyl)aminomethylbenzene, ethylenediamine-N,N'-tetramethylenephosphonic acid, nitrilotriacetic acid, trisuccin, an acidic saccharide, a glycosaminoglycan, diethylenetriaminepentaacetic acid, mono-substituted 2,2'-bipyridine, bis-substituted 2,2'-bipyridine, tris-substituted 2,2'-bipyridine, a hydroxamate derivative, an amino acid derivative, deferoxamine, ferrioxamine, iron basic porphine, porphyrin and derivatives thereof, DOTA-lysine, a texaphyrin, a sapphyrin, a polyaminocarboxylic acid, an α -hydroxycarboxylic acid, a polyethylenecarbamate, picolinic acid, 4-pyridoxic acid, 3-hydroxy-2-pyridineethyl maltol, maltol, Ustilago ferriochrome, and IRC011.

Please cancel claims 19 and 38-43 without prejudice or disclaimer to the subject matter therein.

Please add the following new claims:

56. (New) The medium of claim 1, wherein said transition metal binding compound is ferrous gluconate.

not selected
Amino acid

new claim

Cont
A11

57. (New) The medium of claim 1, wherein said transition metal binding compound is acetohydroxamic acid.?

58. (New) The medium obtained according to claim 24, wherein said transition metal binding compound is ferrous gluconate.?

59. (New) The medium obtained according to claim 24, wherein said transition metal binding compound is acetohydroxamic acid.?

60. (New) The kit of claim 44, comprising (i) one or more cell culture media or media ingredients, (ii) one or more transition elements, (iii) one or more transition element complexes, (iv) one or more cells, and (v) at least one transition element complex.

61. (New) The kit of claim 44, wherein said metal binding compound is not citrate.